#2

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/005,842

DATE: 01/24/2002
TIME: 10:03:46

Input Set : N:\Crf3\RULE60\10005842.raw
Output Set: N:\CRF3\01242002\J005842.raw

ENTERED

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Ni, Jian
Gentz, Reiner
Yu, Guo-Liang
Su, Jeffrey
Rosen, Craig A.

(ii) TITLE OF INVENTION: Death Domain Containing Receptor 5

(iii) NUMBER OF SEQUENCES: 12

(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: Human Genome Sciences, Inc.
(B) STREET: 9410 Key West Avenue
(C) CITY: Rockville
(D) STATE: MD
(E) COUNTRY: US
(F) ZIP: 20850

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:
C--> **(A) APPLICATION NUMBER: US/10/005,842**
C--> **(B) FILING DATE: 07-Dec-2001**
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:
(A) APPLICATION NUMBER: 09/042,583
(B) FILING DATE:
(A) APPLICATION NUMBER: US 60/040,846
(B) FILING DATE: 17-MAR-1997

(viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: Hoover, Kenley
(B) REGISTRATION NUMBER: 40,302
(C) REFERENCE/DOCKET NUMBER: PF366

(ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 3013098504
(B) TELEFAX: 3013098439

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 1600 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

RAW SEQUENCE LISTING DATE: 01/24/2002
PATENT APPLICATION: US/10/005,842 TIME: 10:03:46

Input Set : N:\Crf3\RULE60\10005842.raw
Output Set: N:\CRF3\01242002\J005842.raw

```
60     (ii) MOLECULE TYPE: DNA (genomic)
63     (ix) FEATURE:
64          (A) NAME/KEY: sig_peptide
65          (B) LOCATION: 130..283
67     (ix) FEATURE:
68          (A) NAME/KEY: CDS
69          (B) LOCATION: 130..1362
71     (ix) FEATURE:
72          (A) NAME/KEY: mat_peptide
73          (B) LOCATION: 284..1362
76     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
78 CACGCGTCCG CGGGCGCGGC CGGAGAACCC CGCAATCTTT GCGCCCACAA AATACACCGA      60
80 CGATGCCCGA TCTACTTTAA GGGCTGAAAC CCACGGGCCT GAGAGACTAT AAGAGCGTTC     120
82 CCTACCGCC ATG GAA CAA CGG GGA CAG AAC GCC CCG GCC GCT TCG GGG          168
83           Met Glu Gln Arg Gly Gln Asn Ala Pro Ala Ala Ser Gly
84           -51 -50                 -45                 -40
86 GCC CGG AAA AGG CAC GGC CCA GGA CCC AGG GAG GCG CGG GGA GCC AGG       216
87 Ala Arg Lys Arg His Gly Pro Gly Pro Arg Glu Ala Arg Gly Ala Arg
88             -35                 -30                 -25
90 CCT GGG CCC CGG GTC CCC AAG ACC CTT GTG CTC GTT GTC GCC GCG GTC       264
91 Pro Gly Pro Arg Val Pro Lys Thr Leu Val Leu Val Val Ala Ala Val
92         -20                 -15                 -10
94 CTG CTG TTG GTC TCA GCT GAG TCT GCT CTG ATC ACC CAA CAA GAC CTA       312
95 Leu Leu Leu Val Ser Ala Glu Ser Ala Leu Ile Thr Gln Gln Asp Leu
96      -5                   1                   5                  10
98 GCT CCC CAG CAG AGA GCG GCC CCA CAA CAA AAG AGG TCC AGC CCC TCA       360
99 Ala Pro Gln Gln Arg Ala Ala Pro Gln Gln Lys Arg Ser Ser Pro Ser
100                 15                  20                  25
102 GAG GGA TTG TGT CCA CCT GGA CAC CAT ATC TCA GAA GAC GGT AGA GAT      408
103 Glu Gly Leu Cys Pro Pro Gly His His Ile Ser Glu Asp Gly Arg Asp
104              30                  35                  40
106 TGC ATC TCC TGC AAA TAT GGA CAG GAC TAT AGC ACT CAC TGG AAT GAC      456
107 Cys Ile Ser Cys Lys Tyr Gly Gln Asp Tyr Ser Thr His Trp Asn Asp
108          45                  50                  55
110 CTC CTT TTC TGC TTG CGC TGC ACC AGG TGT GAT TCA GGT GAA GTG GAG      504
111 Leu Leu Phe Cys Leu Arg Cys Thr Arg Cys Asp Ser Gly Glu Val Glu
112      60                  65                  70
114 CTA AGT CCC TGC ACC ACG ACC AGA AAC ACA GTG TGT CAG TGC GAA GAA      552
115 Leu Ser Pro Cys Thr Thr Thr Arg Asn Thr Val Cys Gln Cys Glu Glu
116  75                  80                  85                  90
118 GGC ACC TTC CGG GAA GAA GAT TCT CCT GAG ATG TGC CGG AAG TGC CGC      600
119 Gly Thr Phe Arg Glu Glu Asp Ser Pro Glu Met Cys Arg Lys Cys Arg
120                 95                  100                 105
122 ACA GGG TGT CCC AGA GGG ATG GTC AAG GTC GGT GAT TGT ACA CCC TGG      648
123 Thr Gly Cys Pro Arg Gly Met Val Lys Val Gly Asp Cys Thr Pro Trp
124             110                 115                 120
126 AGT GAC ATC GAA TGT GTC CAC AAA GAA TCA GGC ATC ATC ATA GGA GTC      696
127 Ser Asp Ile Glu Cys Val His Lys Glu Ser Gly Ile Ile Ile Gly Val
128         125                 130                 135
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/005,842

DATE: 01/24/2002
TIME: 10:03:46

Input Set : N:\Crf3\RULE60\10005842.raw
Output Set: N:\CRF3\01242002\J005842.raw

```
130 ACA GTT GCA GCC GTA GTC TTG ATT GTG GCT GTG TTT GTT TGC AAG TCT       744
131 Thr Val Ala Ala Val Val Leu Ile Val Ala Val Phe Val Cys Lys Ser
132     140                 145                 150
134 TTA CTG TGG AAG AAA GTC CTT CCT TAC CTG AAA GGC ATC TGC TCA GGT       792
135 Leu Leu Trp Lys Lys Val Leu Pro Tyr Leu Lys Gly Ile Cys Ser Gly
136 155                 160                 165                 170
138 GGT GGT GGG GAC CCT GAG CGT GTG GAC AGA AGC TCA CAA CGA CCT GGG       840
139 Gly Gly Gly Asp Pro Glu Arg Val Asp Arg Ser Ser Gln Arg Pro Gly
140                 175                 180                 185
142 GCT GAG GAC AAT GTC CTC AAT GAG ATC GTG AGT ATC TTG CAG CCC ACC       888
143 Ala Glu Asp Asn Val Leu Asn Glu Ile Val Ser Ile Leu Gln Pro Thr
144             190                 195                 200
146 CAG GTC CCT GAG CAG GAA ATG GAA GTC CAG GAG CCA GCA GAG CCA ACA       936
147 Gln Val Pro Glu Gln Glu Met Glu Val Gln Glu Pro Ala Glu Pro Thr
148         205                 210                 215
150 GGT GTC AAC ATG TTG TCC CCC GGG GAG TCA GAG CAT CTG CTG GAA CCG       984
151 Gly Val Asn Met Leu Ser Pro Gly Glu Ser Glu His Leu Leu Glu Pro
152     220                 225                 230
154 GCA GAA GCT GAA AGG TCT CAG AGG AGG AGG CTG CTG GTT CCA GCA AAT      1032
155 Ala Glu Ala Glu Arg Ser Gln Arg Arg Arg Leu Leu Val Pro Ala Asn
156 235                 240                 245                 250
158 GAA GGT GAT CCC ACT GAG ACT CTG AGA CAG TGC TTC GAT GAC TTT GCA      1080
159 Glu Gly Asp Pro Thr Glu Thr Leu Arg Gln Cys Phe Asp Asp Phe Ala
160                 255                 260                 265
162 GAC TTG GTG CCC TTT GAC TCC TGG GAG CCG CTC ATG AGG AAG TTG GGC      1128
163 Asp Leu Val Pro Phe Asp Ser Trp Glu Pro Leu Met Arg Lys Leu Gly
164             270                 275                 280
166 CTC ATG GAC AAT GAG ATA AAG GTG GCT AAA GCT GAG GCA GCG GGC CAC      1176
167 Leu Met Asp Asn Glu Ile Lys Val Ala Lys Ala Glu Ala Ala Gly His
168         285                 290                 295
170 AGG GAC ACC TTG TAC ACG ATG CTG ATA AAG TGG GTC AAC AAA ACC GGG      1224
171 Arg Asp Thr Leu Tyr Thr Met Leu Ile Lys Trp Val Asn Lys Thr Gly
172     300                 305                 310
174 CGA GAT GCC TCT GTC CAC ACC CTG CTG GAT GCC TTG GAG ACG CTG GGA      1272
175 Arg Asp Ala Ser Val His Thr Leu Leu Asp Ala Leu Glu Thr Leu Gly
176 315                 320                 325                 330
178 GAG AGA CTT GCC AAG CAG AAG ATT GAG GAC CAC TTG TTG AGC TCT GGA      1320
179 Glu Arg Leu Ala Lys Gln Lys Ile Glu Asp His Leu Leu Ser Ser Gly
180                 335                 340                 345
182 AAG TTC ATG TAT CTA GAA GGT AAT GCA GAC TCT GCC ATG TCC              1362
183 Lys Phe Met Tyr Leu Glu Gly Asn Ala Asp Ser Ala Met Ser
184             350                 355                 360
186 TAAGTGTGAT TCTCTTCAGG AAGTGAGACC TTCCCTGGTT TACCTTTTTT CTGGAAAAAG    1422
188 CCCAACTGGA CTCCAGTCAG TAGGAAAGTG CCACAATTGT CACATGACCG GTACTGGAAG    1482
190 AAACTCTCCC ATCCAACATC ACCCAGTGGA TGGAACATCC TGTAACTTTT CACTGCACTT    1542
192 GGCATTATTT TTATAAGCTG AATGTGATAA TAAGGACACT ATGGAAAAAA AAAAAAAA      1600
195 (2) INFORMATION FOR SEQ ID NO: 2:
197      (i) SEQUENCE CHARACTERISTICS:
198           (A) LENGTH: 411 amino acids
```

RAW SEQUENCE LISTING DATE: 01/24/2002
PATENT APPLICATION: US/10/005,842 TIME: 10:03:47

Input Set : N:\Crf3\RULE60\10005842.raw
Output Set: N:\CRF3\01242002\J005842.raw

(B) TYPE: amino acid
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: protein
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

```
Met Glu Gln Arg Gly Gln Asn Ala Pro Ala Ala Ser Gly Ala Arg Lys
-51 -50                 -45                 -40
Arg His Gly Pro Gly Pro Arg Glu Ala Arg Gly Ala Arg Pro Gly Pro
-35                 -30                 -25                 -20
Arg Val Pro Lys Thr Leu Val Leu Val Val Ala Ala Val Leu Leu Leu
                -15                 -10                  -5
Val Ser Ala Glu Ser Ala Leu Ile Thr Gln Gln Asp Leu Ala Pro Gln
              1                   5                  10
Gln Arg Ala Ala Pro Gln Gln Lys Arg Ser Ser Pro Ser Glu Gly Leu
     15                  20                  25
Cys Pro Pro Gly His His Ile Ser Glu Asp Gly Arg Asp Cys Ile Ser
 30                  35                  40                  45
Cys Lys Tyr Gly Gln Asp Tyr Ser Thr His Trp Asn Asp Leu Leu Phe
                 50                  55                  60
Cys Leu Arg Cys Thr Arg Cys Asp Ser Gly Glu Val Glu Leu Ser Pro
             65                  70                  75
Cys Thr Thr Thr Arg Asn Thr Val Cys Gln Cys Glu Glu Gly Thr Phe
          80                  85                  90
Arg Glu Glu Asp Ser Pro Glu Met Cys Arg Lys Cys Arg Thr Gly Cys
     95                 100                 105
Pro Arg Gly Met Val Lys Val Gly Asp Cys Thr Pro Trp Ser Asp Ile
110                 115                 120                 125
Glu Cys Val His Lys Glu Ser Gly Ile Ile Ile Gly Val Thr Val Ala
                130                 135                 140
Ala Val Val Leu Ile Val Ala Val Phe Val Cys Lys Ser Leu Leu Trp
            145                 150                 155
Lys Lys Val Leu Pro Tyr Leu Lys Gly Ile Cys Ser Gly Gly Gly Gly
        160                 165                 170
Asp Pro Glu Arg Val Asp Arg Ser Ser Gln Arg Pro Gly Ala Glu Asp
    175                 180                 185
Asn Val Leu Asn Glu Ile Val Ser Ile Leu Gln Pro Thr Gln Val Pro
190                 195                 200                 205
Glu Gln Glu Met Glu Val Gln Glu Pro Ala Glu Pro Thr Gly Val Asn
                210                 215                 220
Met Leu Ser Pro Gly Glu Ser Glu His Leu Leu Glu Pro Ala Glu Ala
            225                 230                 235
Glu Arg Ser Gln Arg Arg Arg Leu Leu Val Pro Ala Asn Glu Gly Asp
        240                 245                 250
Pro Thr Glu Thr Leu Arg Gln Cys Phe Asp Asp Phe Ala Asp Leu Val
    255                 260                 265
Pro Phe Asp Ser Trp Glu Pro Leu Met Arg Lys Leu Gly Leu Met Asp
270                 275                 280                 285
Asn Glu Ile Lys Val Ala Lys Ala Glu Ala Ala Gly His Arg Asp Thr
                290                 295                 300
Leu Tyr Thr Met Leu Ile Lys Trp Val Asn Lys Thr Gly Arg Asp Ala
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/005,842

DATE: 01/24/2002
TIME: 10:03:47

Input Set : N:\Crf3\RULE60\10005842.raw
Output Set: N:\CRF3\01242002\J005842.raw

```
273             305                 310                 315
275 Ser Val His Thr Leu Leu Asp Ala Leu Glu Thr Leu Gly Glu Arg Leu
276         320                 325                 330
278 Ala Lys Gln Lys Ile Glu Asp His Leu Leu Ser Ser Gly Lys Phe Met
279     335                 340                 345
281 Tyr Leu Glu Gly Asn Ala Asp Ser Ala Met Ser
282 350                 355                 360
284 (2) INFORMATION FOR SEQ ID NO: 3:
286      (i) SEQUENCE CHARACTERISTICS:
287           (A) LENGTH: 455 amino acids
288           (B) TYPE: amino acid
289           (C) STRANDEDNESS: single
290           (D) TOPOLOGY: linear
292     (ii) MOLECULE TYPE: protein
297     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
299      Met Gly Leu Ser Thr Val Pro Asp Leu Leu Pro Leu Val Leu Leu
300      1               5                   10                  15
302      Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro
303                  20                  25                  30
305      His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro Gln Gly Lys
306              35                  40                  45
308      Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr Lys Cys His Lys
309          50                  55                  60
311      Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp
312      65                  70                  75                  80
314      Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu
315                      85                  90                  95
317      Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val
318                  100                 105                 110
320      Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys Gly Cys Arg
321              115                 120                 125
323      Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu Phe Gln Cys Phe
324          130                 135                 140
326      Asn Cys Ser Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu
327      145                 150                 155                 160
329      Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu
330                      165                 170                 175
332      Asn Glu Cys Val Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr
333                  180                 185                 190
335      Lys Leu Cys Leu Pro Gln Ile Glu Asn Val Lys Gly Thr Glu Asp Ser
336              195                 200                 205
338      Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe Gly Leu Cys Leu
339          210                 215                 220
341      Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys
342      225                 230                 235                 240
344      Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu
345                      245                 250                 255
347      Gly Glu Leu Glu Gly Thr Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser
348                  260                 265                 270
```

VERIFICATION SUMMARY DATE: 01/24/2002
PATENT APPLICATION: US/10/005,842 TIME: 10:03:48

Input Set : N:\Crf3\RULE60\10005842.raw
Output Set: N:\CRF3\01242002\J005842.raw

L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]